

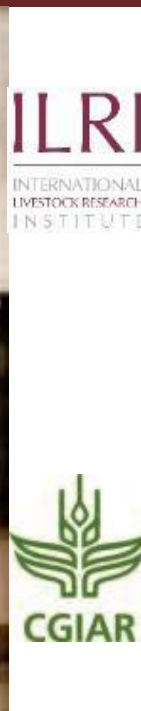
# Dairy systems for smallholders in poor countries: Options for improving livelihoods

*Isabelle Baltenweck*

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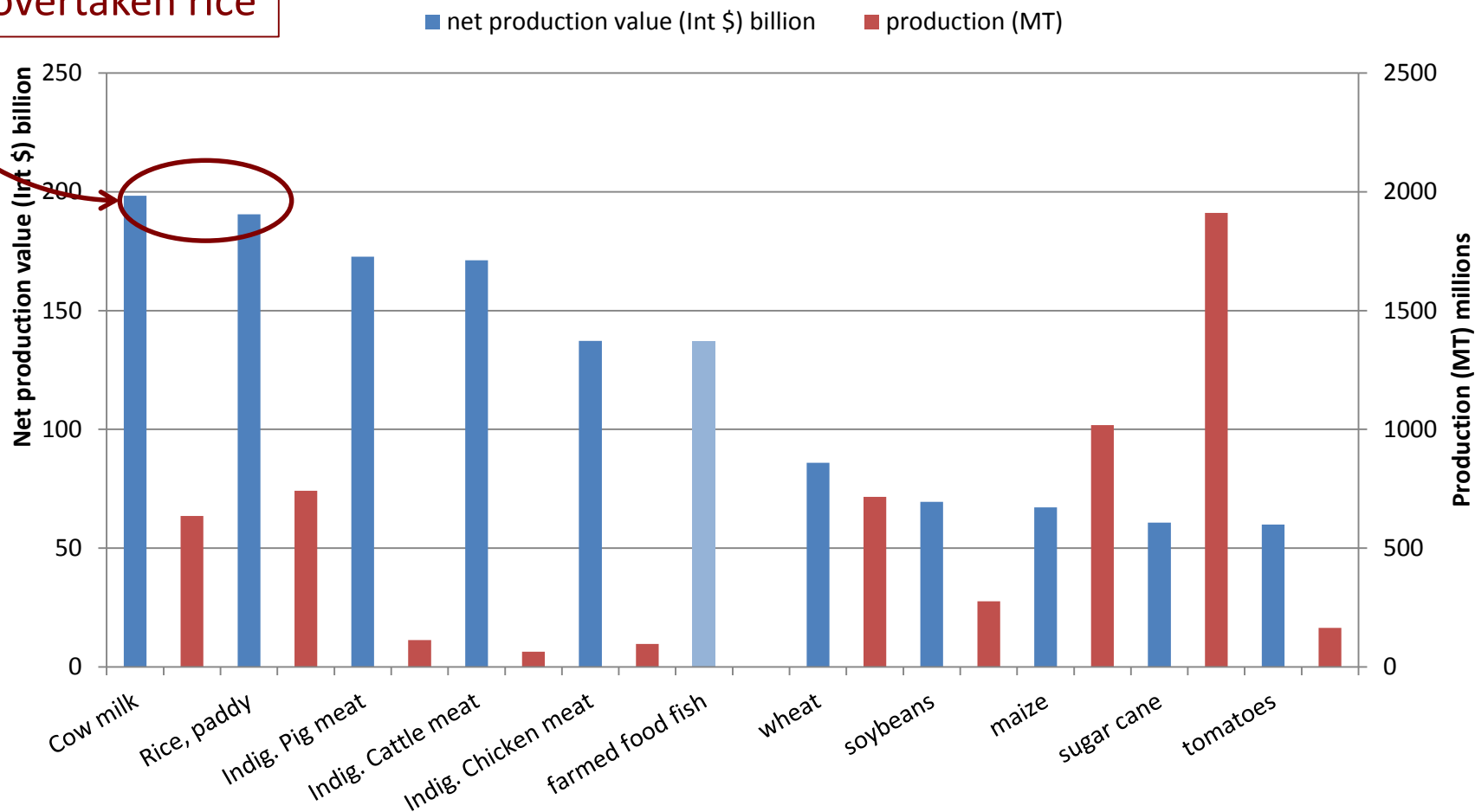
Committee on World Food Security—Dairy Side Event

21 Oct 2016



# Animal source foods: 5 of 6 highest value global commodities (total value of these 5=US Int \$715 billion)

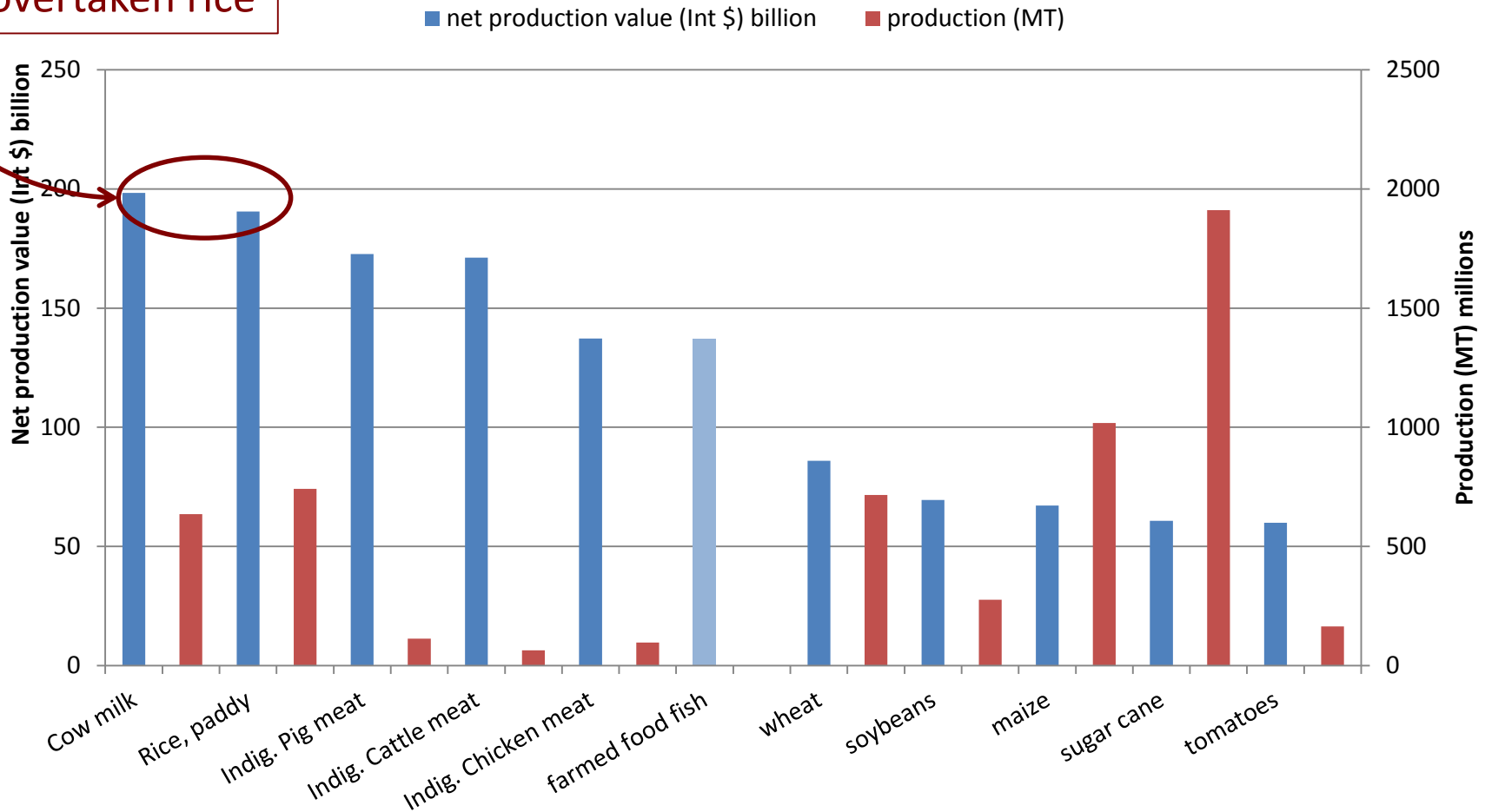
Cow milk has overtaken rice



**Global value**

source foods: 5 of 6 highest value global commodities (total value of these 5=US Int \$715 billion)

Cow milk has overtaken rice



# Huge increases over 2005/7 amounts of cereals, dairy and meat will be needed by 2050

From 2bn–3bn  
tonnes cereals each year



From 664m–1bn  
tonnes dairy each year



From 258m–460m  
tonnes meat each year





**Global  
demand**

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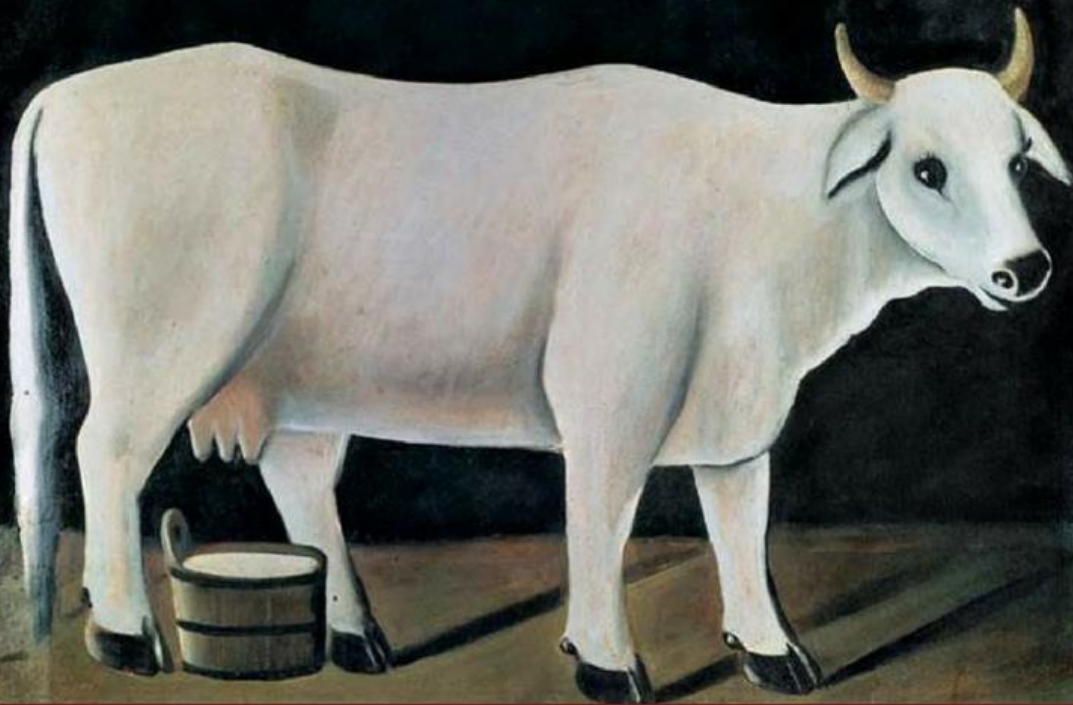
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# Milk matters: For livelihoods

dairy

White cow on Black Background, by Niko Pirosmami



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# Livestock and livelihoods

- Almost a billion people rely on livestock for livelihoods
- Over 100 million landless people keep livestock.
- For the vulnerable, up to 40% of benefits from livestock keeping come from non-market, intangible benefits, mostly insurance and financing.
- In the poorest countries, livestock manure comprises over 70% of soil fertility amendments.
- Many employed in local informal livestock product markets
- 90% of animal products are produced and consumed in the same country or region
- Over 70% of livestock products are sold 'informally'





# Smallholders still dominate livestock production in many countries

Region (definition of 'smallholder')	% production by smallholder livestock farms					
	Beef	Chicken meat	Sheep/goat meat	Milk	Pork	Eggs
<b>East Africa</b> (≤ 6 milking animals)				60-90		
<b>Bangladesh</b> (< 3ha land)	65	77	78	65		77
<b>India</b> (< 2ha land)	75	92	92	69		71
<b>Vietnam</b> (small scale)					80	
<b>Philippines</b> (backyard)		50			35	



# Milk matters: For food

milk



Tutsi milk container, Rwanda, Africa and Beyond Art Gallery

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# Milk matters: For infant and child nutrition

Sculpture of child, Tang Dynasty, China, via Epoch Times



child

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# Milk matters: For human health

human health

Carrot Note, by Jean Dubuffet, 1962



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# Milk matters: For gender equity

gender

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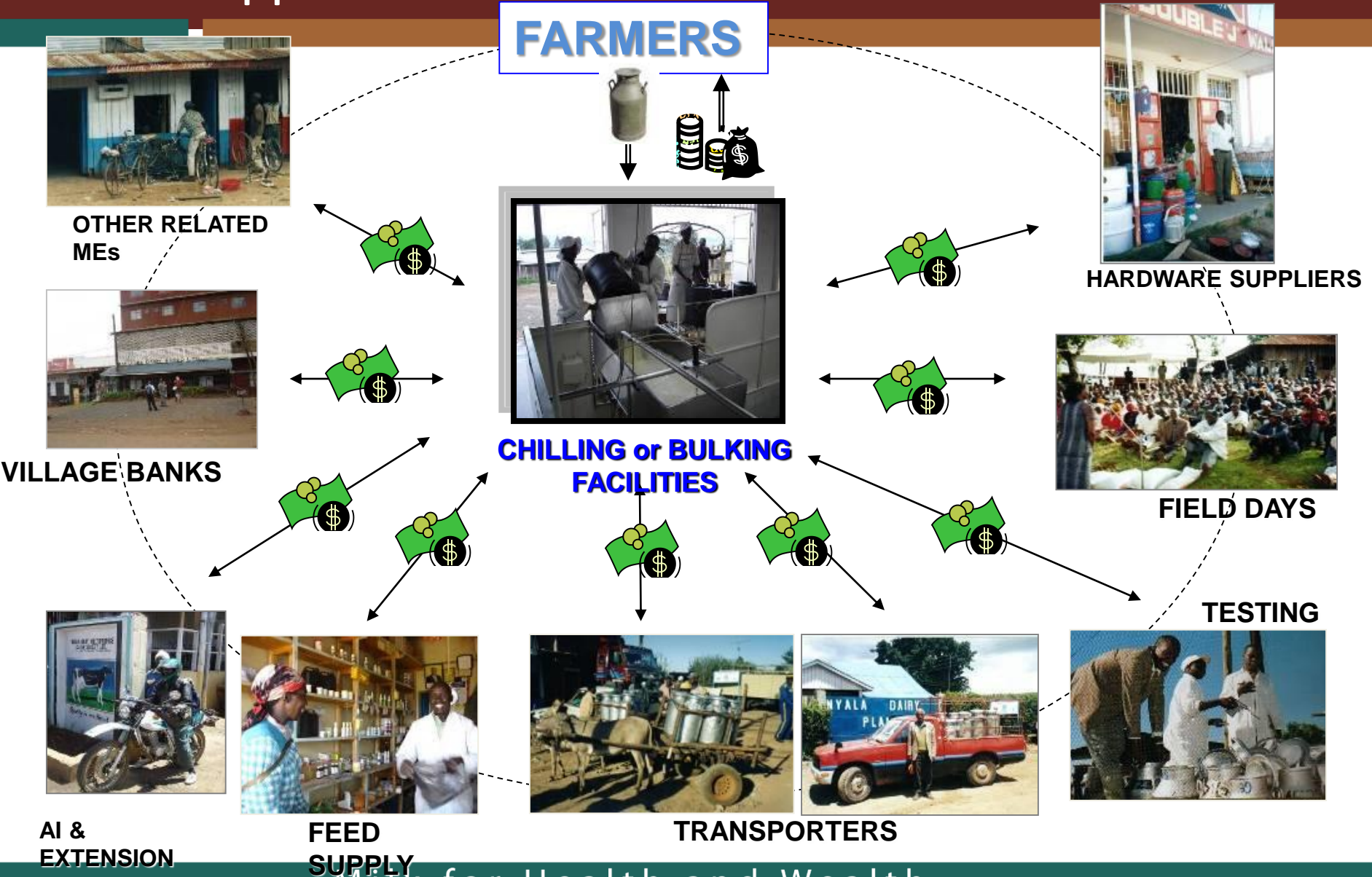
Painted terracotta female figure, painted from Ma'mariya, Egypt ca. 3500–3400 BCE, predynastic period



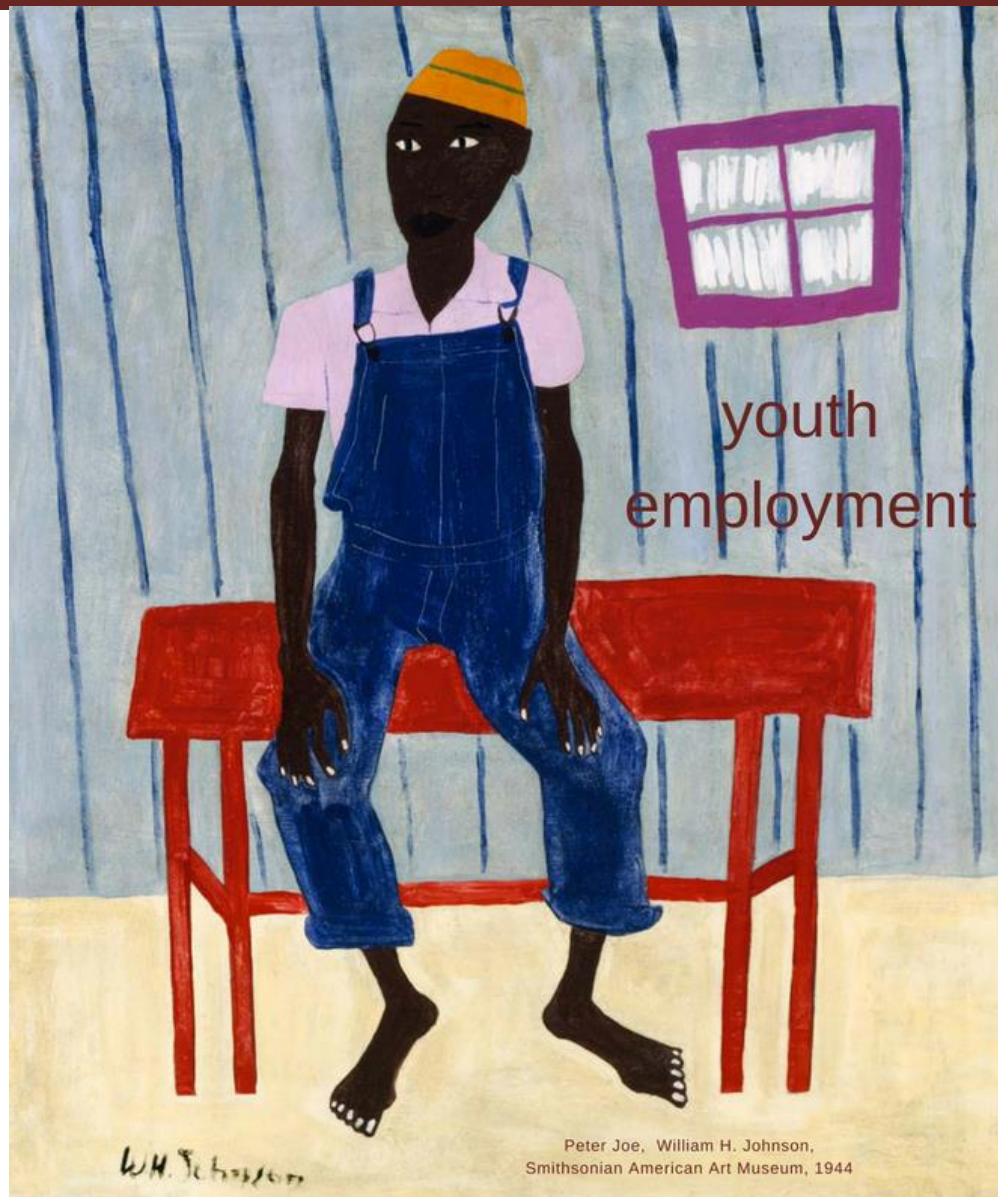


# Milk matters: For income

## The Hub approach



# Milk matters: For youth and jobs



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# Milk matters: For environment

climate change

Untitled, Mark Rothko, 1968



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*Animal scientist, Nobel Prize Laureate for Physiology or Medicine—1996*

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